

College Reading 3

Answers key

Chapter 1 Sociology: Race and Ethnicity

Note to teachers: Please read the Teaching Notes before discussing the answers with your students. Given the topic of race and ethnicity, the answers to these questions are suggested, not absolute.

Reading Assignment 1: Getting Ready to Read, page 2

How are the above men the same? How are they different?

The men are from similar ethnic and cultural groups, but are generally seen to be of different races.

How are the above men the same? How are they different?

The men are from similar different ethnic and cultural groups, but are generally understood to be of the same racial groupage

How are the above women the same? How are they different?

The women are from different ethnic and cultural groups, but are generally understood to be from the same racial groupage

Exercise 1: Participating in class discussion, page 3

1. Students should mention physical and cultural similarities and differences with the three groups. Indications of cultural differences might be clothing, style, adornment, and facial expression.
2. The dictionary definitions of race and ethnicity are very similar. Reading Selection 1 suggests that race refers to biological traits, while ethnicity refers to cultural and behavioral traits.
3. Students will bring their current understanding of the terms race and ethnicity. The instructor should try to broaden that understanding to first make the standard distinction between the two (physical differences vs. cultural differences) and then lead to a more sociological perspective which makes distinctions based on social structure.
4. Group C
5. Group A
6. Answers will vary.
7. This question asks students to evaluate material based on their knowledge and experience. Try to work into the discussion the concepts of dominant and minority grouping, segregation, subjugation, and integration without having to use those terms directly.

Exercise 2: Scanning for academic vocabulary, page 4

1. minority 1

2. sociologists 1
3. aspect 1
4. military 2
5. dominant 2
6. established 3
7. norms 5
8. structure 5
9. majority 6
10. discrimination 6
11. identified 6
12. ethnicity 6
13. traits 7
14. traditionally 7
15. migration 8
16. accurately 8
17. data 9
18. uniform 9
19. categories 9
20. available 11
21. culture 11
22. trends 12
23. comprise 14
24. diverse 15
25. retain 16
26. generation 17
27. voluntary 18a
28. intense 18c
29. factors 18d



- 30. participate 19
- 31. respond 19
- 32. ranging 19
- 33. transferred 19a
- 34. estate 19b
- 35. maintaining 19c
- 36. targeted 19d
- 37. responded 20
- 38. negative 20
- 39. submission 20a
- 41. withdrawal 20b
- 41. status 20c
- 42. distinctive 21a
- 43. process 21a
- 44. acknowledges 21b
- 45. unique 21b

Exercise 3: Studying the pre-reading strategy, page 6

1. Studying sociology in American Colleges and Universities to meet distribution requirements.
 2. (1st question) Studying sociology, one of the social sciences, gives breadth.. To study it for one's major would give depth.
- (2nd question) Sociology, particularly the sociology of race and ethnicity.

Exercise 4: Focusing on "Studying Sociology," page 8

- 1.a. 2. c. 3. d. 4. c.

Exercise 5: Writing short-answer responses, page 9

Written answers will vary but should include the following information:

1. •Breadth of study equals an introduction to the general range of academic disciplines usually studied in an American university or college.

•Depth of study equals intensive study of a single discipline which is usually called one's major. Students typically take a number of courses in that major.

2. Distribution requirements are the classes a student must take and they represent the general groups of academic disciplines. Examples: Science, humanities, and social science

Exercise 6: Previewing and learning key terms, page 10

1. dominant group
2. minority groups
3. sociologists
4. norm
5. characteristic
6. repressed

Exercise 7: Scanning for supportive evidence, page 12

Question Paragraph

- | | | | | | |
|-------|-------|-------|-------|-------|-------|
| 1. 11 | 2. 11 | 3. 12 | 4. 13 | 5. 14 | 6. 17 |
|-------|-------|-------|-------|-------|-------|

Exercise 8: Identifying indicators of supportive evidence, page 13

YES Numbers and percentages

YES "In actual practice"...

YES Dates

YES Example(s)

YES "In the United States"...

YES "In fact"...

Check all items as they are all indicators of supportive evidence.

Exercise 9: Outlining with supportive evidence, page 20

I. minorities treated view

II. dominant group 15th Century of

Example: In Spain – the group whose power dates from 15th century rulers – white Roman Catholic speakers of Castilian Spanish.

III. Minority Groups society, overpowered, minority

Example: American Indians, Immigrants other than the English

IV. Racial Groups race, physical, traits.

1. Africa

2. Asia

3. Europe

social structure, categories

1. White, non-Hispanic

2. Black

3. Hispanic

4. Asian and Pacific Islander

5. American Indian, Eskimo, Aleut

categories, identify

V. Ethnic Groups physical, ethnic, cultural, norms

Examples:

1. Asian American: Japanese, Koreans, Vietnamese

2. Jews

identities, cultural

VI. Characteristics of Minority Groups

minority, unequal

1. shared physical or cultural characteristics

2. ascribed status

3. group solidarity

4. endogamy

VII. Patterns of Response and Repression

repression, dominant

1. Forced Removal Definition: A minority population is transferred to a separate geographic location. Example: The Cherokee removal to Oklahoma

2. Segregation Definition: A minority group is kept separate from the

dominant group in the same location. Example: Blacks kept from whites in the Southern US.

3. Subjugation Definition: A dominant group maintains control over minorities by force. Example: Israel's control over the Palestinians

4. Annihilation Definition: The destruction of a minority groupage Example: In Rwanda, the Tutsis were murdered by the Hutus.

responded, negative, treatment

1. Submission or acceptance Definition: Deferring to the members of the dominant groupage

2. Withdrawal Definition: Avoiding contact with the dominant groupage

3. Agitation and violence Definition: Protesting minority status and unequal treatment through revolt.

VIII. Assimilation – Melting Pot or Cultural Salad immigrant, white, assimilate

1. The melting pot Definition: The process of assimilation where the minority groups joins the dominant culture and loses its identity.

2. The salad bowl Definition: Minority groups are part of the larger group while maintaining unique qualities of their cultures.

Exercise 10: Understanding elaboration patterns, page 25

Example 2, Step 3:

- The concept of race relies on dividing all people into racial groups.
- Those groups are based on skin color.
- The groups are also based on ancestral origin.

Example 3, Step 2:

The First Sentence

The Second Sentence

Society in the United States

has tried to encourage most of its immigrant minority groups

to join (assimilate into) mainstream society.

It

has done this

in two ways, described by figures of speech: a melting pot and a salad bowl.

Step3:

- Assimilation occurs in two main but different ways.
- The first is called “a melting pot”.
- The second is called “a salad bowl”.

Exercise 11: Understanding concepts from sociology, page 29

1. T 2. T 3. F 4. T 5. F 6. F 7. F 8. T 9. T 10. T 11. F 12. F 13. T 14. T

Exercise 12: Checking comprehension, page 30

1. b 2. c 3. d 4. a 5. b

Exercise 13: Discussing a key question, page 31

A possible answer should include the following points:

- Race is a concept that uses physical characteristics to divide people into groups.
- Sociologists recognize that racial mixing over time has meant there are many variations of racial groups.
- Sociologists prefer to use ethnic groups to identify people.
- Ethnic groups are based on cultural factors such as national origin, religion, language, norms, and values.

Exercise 14: Summarizing what you read, page 32

Step 2: The four aspects of minority groups are shared physical or cultural characteristics, ascribed status, group solidarity, and endogamy.

Step 3: The four aspects of minority groups are shared physical or cultural features, ascribed statuses, group solidarity, and endogamy.

Step 4: c. Members of minority groups stick together and help each other, especially when they are being attacked by others.

d. Because members of dominant groups do not want to join minorities and because minorities want keep their groups together, minorities often marry members of the same groupage

Step 5: Students will write and submit summaries which include the points given in steps 3 and 4. They should also report the number of words in their summaries to compare with the 197 words in the original. Their summaries should be less than half the length (98 words) of the original.

1. A summary is a brief statement of the main points of a longer reading.
2. Writing a summary helps students understand reading material and remember it by analyzing the original text and putting the material into their own words.

Exercise 15: Writing short-answer responses, page 34

Suggested Answers

1. •Sociology is the study of the social behavior of humans.

•According to Compte, sociologists look for patterns in group behavior.

•Sociology is similar to history, anthropology, psychology, economics, geography and political science because they all look at aspects of society.

2. •A dominant group is one that has the power in a society.

- Minority groups are groups which are controlled by dominant groups.

- In America, descendents of white Europeans have been the dominant group while American Indians, Blacks, Hispanics, and others have been in the minority groupage

3. •Sociologists look beyond the biology of race and see race as it relates to social structure.

- Sociologists rely on data gathered through the census bureau to define a person's race.

- These categories depend on cultural factors rather than relying on a physical description a person might have.

- The concept of race becomes more complicated to a sociologist than it does to those who look only at inherited physical traits.

4. •Cultural factors might be language, national origin, religion, norms, and values.

- Mexican people might be identified because most speak Spanish, belong to the Catholic Church, and strongly value family relationships.

5. •To retain their identities, ethnic groups must pass on their cultural beliefs from one generation to the next.

- Marry within the ethnic groupage

- Form friendships within the groupage

- Share the same religion.

- Eat the same kind of food.

- Enjoy the same art and entertainment.

- Examples: Italian food, Greek dancing, sharing the same Jewish faith

6. •Minority group members share physical and cultural similarities. They may look alike and they also share similar customs, religion, language, and ancestry.

- Minority group members have ascribed status. This means they are born into the groupage

- Minority group members form solidarity with other members of their groupage This means they support each other and face the world together.

- Members of a minority generally marry other members of the same groupage This is called endogamy.

Exercise 16: Answering warm-up questions, page 35

Suggested Answers

1. Meri Nana-Ama Danquah

2. The story is about the challenges faced by a mother and her daughter in assimilating into American society.

3. The story was written in the 1990's

www.kaues.org

4. The story takes place in Los Angeles.
5. The author wrote the story to explain what it is like to live as an “alien” in American society.

Exercise 17: Applying the prereading strategy, page 36

1. Ghana
2. She is an African-American

Suggested Answers

3. African-Americans are often defined by their skin color, yet they come from many differing cultures.
4. She may have experienced some prejudice from the dominant culture and even from black Americans who did not share her immigrant situation.
5. She may have been dominated, withdrawn, or she may have fought back against discrimination.

Exercise 18: Matching activity, page 43

1. i. 2. l. 3. a. 4. n. 5. c. 6. h. 7. j. 8. k. 9. m. 10. o. 11. b. 12. e. 13. f.
14. d. 15. g. 16. p.

Exercise 19: Answering discussion questions, page 44

This is a discussion activity, so answers will vary. Some suggested responses are as follows:

1. o Danquah tells of the food and customs of her native country Ghana.
 - o She also contrasts her native languages with the languages of other immigrants.
2. o Danquah mentions her physical characteristics such as her skin color and the type of her hair as well cultural characteristics like her ancestry, food and eating style, clothing, and her language and accent.
 - o She also discusses what the sociology chapter describes her “ascribed status” in that she is an African-American woman with an ethnicity separate from the dominant group and other minority groups.
 - o She describes the group solidarity she feels in being part of her culture, particularly as it relates to food customs. She also expresses a solidarity with other immigrants.
3. Her attempts at adopting the lifestyle and eating habits of other residents of Los Angeles were unsuccessful. She craved her own food and found comfort and identity in the eating style of her family. This experience is a reflection of her attempt to adapt to life in her adopted country.
4. Many aspects of Danquah’s identity, such as the physical and cultural factors mentioned in question 2 as well as her legal status cause her to be segregated from the dominant culture. She may feel subjugated by her legal status as an alien and the confusion that causes her daughter. Subjugation, though, is generally an intentional use of power over a specific minority group in order to maintain control over that groupage
5. Danquah describes her submission and acceptance of the dominant culture, particularly when she discusses her accent and how she adapted to the mainstream culture. She also describes her withdrawal from the dominant culture in returning to being a meat eater as well considering herself a temporary resident of the US

during her many years of living in America. She does not express agitation or violence towards the dominant culture, but she does express a lack of ease in adopting US citizenshippage

6. The parents may have valued their Ghanaian ancestry and wanted their children to maintain her identity with being Ghanaian. She says they always talked about going back to Ghana.

7. Answer could vary because there is evidence that some of her cultural identity (language, accent, hairstyle) might “melt” into the general American culture, yet Danquah’s identity with her native culture is so strong that she will probably follow more in the “salad bowl” model where she keeps many aspects of her identity while living in America.

Exercise 20: Reviewing academic vocabulary, page 45

These are the paragraphs where the words can be found. Students will each identify words they need to study.

1.

adult

1.

2.

assume

3.

3.

temporary

3.

4.

integral

3.

5.

shifted

4.

6.

survive

6.

7.

distinct

www.kaues.org

6.

8.

constantly

7.

9.

encountered

12.

10.

commitment

13.

Exercise 21: Reviewing comprehension, page 46

Suggested answers are as follows:

1. Sociology is a social science because it is a study of how humans work and live in social groups. It is scientific because sociologists rely on data they gather from the study of social groups, such as reports from the census bureau.

2. Race and ethnicity are terms which describe people as being part of a group or society. Sociologists study people in groups, so sociologists naturally want to study how these groups are defined and function.

3. Minority groups are often but not always numerically smaller than majority or dominant groups. Groups are in the minority if another group has the power within a society over others. The group that has the power is dominant, like Jews in Israel, while the group without the power is a minority, such as the Palestinians.

4. The sociology text mentions three forms of repression: forced removal, segregation, and subjugation. Examples not in the text are as follows:

Forced removal: Stalin's movement of cultural groups within the Soviet Union. He sometimes moved ethnic groups from their homelands and sometimes moved ethnic Russians to the homeland of the ethnic groups in order to maintain control. The descendents of these movements are still impacted today.

Segregation: Under the policy of apartheid, the government of South Africa kept blacks separate from whites for decades. Each group had separate schools, housing areas, and types of jobs.

Subjugation: Guest workers in some European countries, such as Germany, are never allowed to become citizens of those countries even if they legally live and work in those countries for extended periods. Also, females belonging to the Islamic faith are not allowed to wear a veil in France.

Annihilation: The genocides of Jews in Germany, cultural elites in Cambodia (Kampuchea), Kurds in Iraq and Turkey, and non-Arab villagers in the Darfur region of Sudan are some other examples of policies of annihilation.

5. The three ways to respond to repression are submission and acceptance, withdrawal, and agitation and violence. Becoming a citizen and voting might be an example of the first. Marrying within the cultural group only is an example of withdrawal, and the activities of Chechen rebels and terrorists is an example of agitation and violence.

6. The two models are the melting pot and the salad bowl. With the melting pot model, all cultural identity is melted into the general dominant culture. Eventually (usually after one or two generations) all indicators of a culture, such as a native language, are forgotten through lack of use. With the salad bowl model, many of the cultural aspects are retained, but the individuals are also “in the bowl.” This means they belong to the culture of the adopted country in ways that are significant and legal. In America, the ideal situation is for cultures to maintain their identity but become Americans in the sense of believing in central American creeds such as the idea that “all men are created equal”.

7. Danquah feels separate from the dominant culture. She is identified as an alien and finds that much of her native culture is different from the mainstream. Many immigrants experience the same sense of being different. Their language and cultural practices often set them apart from belonging to the dominant culture and even from their children as it did for Danquah.

8. Danquah’s experience would certainly be different if she were of a different race because as a black person she is identified with black minorities, yet culturally she is very different from them. This is a complication that people of other races (particularly white people) do not face in being immigrants in America.

Exercise 22: Responding to questions about learning, page 48

Answers for these questions come from the students’ experiences and reflections on material covered in the chapter. Teachers should encourage individually unique responses where the students are able to personalize the concepts introduced in the readings in the chapters.

Exercise 23: Reviewing academic vocabulary, page 50

1. c. 2. a. 3. b. 4. d. 5. c.

Chapter 2 : Psychology: Stress and Adaptation

Note to teachers: Please read the Teaching Notes for this chapter before discussing the answers with your students.

Exercise 1: Recognizing word family members, page 52:

Word Form

Answers

Psychologist

4. A person trained and educated to perform psychological research, testing, and therapy.

Psychological

2. An adjective form of the base word meaning of or relating to psychology.

Psychology

1. The science that deals with mental processes and behavior.

Psych

5. The short or abbreviated form of the word psychology. It is often used in college course schedules to list psychology classes.

Psychotherapy

3. The treatment of psychological problems by encouraging communication of and insight into conflict.

Exercise 2: Using correct word forms, page 53

1. psychological

2. psychology

3. Psych

4. Psychologists

5. psychotherapy

Exercise 3: Defining psychology, page 53

Psychologists study

yes the ways people learn.

yes the mental and personal growth of children.

yes how to help people with mental health problems.

no human social behavior.

yes the different types of people and their behavior.

no the evolution and physical development of humans.

Exercise 4. Understanding stress, page 55

A. 1. strain, anxiety, demands 2. alter, change, modify

B. •hearing of the death of a friend or relative

•moving to a new house

•getting married

•going through divorce

•giving a speech

•immigrating to a new country

C. 1. c. 2. b., 3. b.

Exercise 5: Previewing phrases with stress: page 57

Group One

1. Noun
2. relentless, intense, and persistent
3. Item 3: Stress happens repeatedly, based on the words “relentless” and “persistent” in the phrases.

Group Two

1. adjective
2. Stress relates to or goes together with disorders.

Group Three

1. adjective
2. To be someone who researches the subject of stress.

Group Four

1. noun
2. It continues to give stress, to which an individual will respond.

Group Five

1. adjective
2. Moving, changing a job, going through a divorce are examples.

Exercise 6: Understanding charts, page 59

1. Sources of stress
2. The stressor term to the left
3. The key points further define the terms and tells us the importance of these terms

Exercise 7: Extending a chart, page 61

Hassles: traffic jams, chores, bad weather

Life events: The death of a loved one, having a baby, getting married

Frustration: Not being able to get a promotion or attend college

Conflict: Choosing the right school to attend, avoiding the dentist

Traumatic stressors: Involvement in an accident or crime, a medical crisis

Type A behavior pattern: Meeting deadlines, competing in a game

Acculturative stress: Moving to a new country, struggling with a new language, facing discrimination

Exercise 8: Previewing to identify the topic, page 62

1. Hans Selye
2. He recognized that the body reacts in the same way to various stressors.
3. He called it the general adaptation syndrome
4. GAS

Exercise 9: Previewing headings, page 62

- I. Introduction
- II. The Alarm Stage
- III. Resistance Stage
- IV. Exhaustion Stage
- V. Conclusion

Exercise 10: Understanding reactions to stress, page 66

1. c.
2. b.
3. a.
4. c.
5. c.

Exercise 11: Analyzing sentences about research, page 67

1. Perceived somebody or something to be, after observation or experience:
2. Knew or identified from past experience or knowledge
3. Gave a name to
4. To be made up of or composed of

Exercise 12: Filling in the blanks, page 70

1. called
2. consists
3. recognized
4. found

Exercise 13: Analyzing writing style, page 70

1. The author uses reporting verbs throughout the passage and also uses verbs in the present tense and the present passive to discuss scientific findings.
2. Examples: "The alarm stage is called..." "The alarm stage is accompanied by..." "The alarm reaction was designed"...
3. Knowing about the elements of scientific writing helps the reader to recognize when scientific writing is being used by an author. This should alert the reader to slow down and carefully follow the development of the scientific information. It also helps the reader know how certain vocabulary such as found, consists, and recognized are being used in the scientific context.

Exercise 14: Using context clues, page 71.

1. A possible new sentence: The engineer made a discovery about trains wheels that could be layered over the many different uses of these wheels to help them operate more effectively.

Uses of context: Context helps readers define and understand words. In this case, the new term, layered over, was used in contrast to specific situations. Consequently the reader can see layered over indicates a general sense: it applies to all situations.

2. A possible new sentence: Stress in the modern world is very persistent.

Uses of context: The context can point out the importance of reference words. In this example, “its” is a reference word which ties persistence to the stressor. Thus, the reader knows that persistence is related to the existence of stress. Additionally, the word is used to show that because of its “persistence,” a stressor does more harm. The context tells us that persistence increases the amount of stress.

Exercise 15: Finding the text organization, page 74

A.

1. The alarm stage
2. The resistance stage
3. The exhaustion stage

B. Suggested notes on paragraph 6:

The Text—Paragraph 6—The Resistance Stage

Possible notes

Death may occur within the first few hours or days of exposure to a stressor that is so damaging (such as extreme cold) that its persistence is incompatible with life. But if survival is possible and the stressor continues, the body attempts to adapt to it as best it can. Selye called this part of the GAS the resistance stage (also called adaptation stage). During this stage, the body attempts to return to a normal biological state by restoring spent energy and repairing damage. Yet arousal remains high, though not as high as during the alarm reaction. This prolonged bodily arousal may be accompanied by such emotional reactions as anger, fatigue, and irritability.

Transition from the last paragraph

an example

Use of contrast to introduce the main topic: the resistance stage

Definition of the main idea

Further definition and explanation of the resistance stage

C. Discussion should follow where students investigate the elements of paragraphs 7 and 8. They should identify similar elements to those found in paragraphs 2 and 6 above.

Exercise 16: Finding the total organizational structure, page 76

The Body's Response to Stress—The General Adaptation Syndrome

I. Introduction

- a. Research basis by Hans Selye
- b. Definition of GAS
- c. Introduction of the stages

II. The Alarm Stage

- a. Definition
- b. Example
- c. Explanation
- d. Additional physiological and psychological factors
- e. Triggers of stress
- f. Summary and significance of initial response to stress

III. The Resistance Stage

- a. The results of over exposure to initial stress
- b. Adaptation introduces the resistance stage
- c. Definition
- d. Characteristics of the resistance stage.

IV. The Exhaustion Stage

- a. Introduction of the exhaustion stage
- b. Definition
- c. Results of exhaustion
- d. Differences between the stress of our ancestors and modern-day stress.

Exercise 17: Understanding graphs, page 77.

- 1. No
- 2. Yes
- 3. Yes
- 4. Yes
- 5. Answers may vary, but probably ... Yes

Exercise 18: Reading graphs, page 79.

- 1. Level of resistance, Time

2. They show and increase in the two factors.
3. The top shows the stages of stress as a graph from the beginning to the end.

The middle shows drawings of an individual who is experiencing stress.

The bottom gives a written description of the stages of stress.

4. The changes in color reflect the changes in the stages of stress.

Exercise 19: Interviewing classmates, page 80.

The answers will vary as the responses depend on the personal experiences of the students. The instructor should emphasize having the students use the terminology and concepts introduced in the readings about stress.

Exercise 20, Previewing vocabulary, page 81

1. •Acculturate: (v.) To cause (a society, for example) to change by the process of acculturation.
 •Acculturation: (n.) ac · cul · tur · a · tion n. The modification of the culture of a group or individual as a result of contact with a different culture_____.
 •Other forms: ac · cul · tur · a · tion · al (adj.) and ac · cul · tur · a · tive (adj)
2. •Linguistic: adj. Of or relating to language or linguistics.
 •Lin-guis-tics: n. (used with a sing. verb) The study of the nature, structure, and variation of language.
 •Lin-guist: n. 1. A person who speaks several languages fluently. 2. A specialist in linguistics.
3. •Customs: n. A practice [or practices] followed by people of a particular group or region.
4. •Dominant: adj. 1. Exercising the most influence or control. 2. Most prominent, as in position; ascendant.
 •Dom-i-nate v. dom-i-nat-ed, dom-i-nat-ing, dom-i-nates v. tr. 1. To control, govern, or rule by superior authority or power: Successful leaders dominate events rather than react to them. 2. To exert a supreme, guiding influence on or over: Ambition dominated their lives.
 •Dom-i-nance n. The condition or fact of being dominant.

***** Note: All definitions are from the American Heritage Dictionary**

Exercise 21: Previewing the first paragraph, page 82

Suggested answers follow:

1. Acculturative Stress is the stress a person, particularly an immigrant, experiences due to the process of becoming acculturated.
2. The stress comes from conflicts a person experiences between the home culture and the new culture.

3. An example might be dating and marriage customs. In a traditional culture, parents often identify a marriage partner for their children. In a less-traditional culture, the child usually wants to find his or her own partner.

4. The rest of the selection will define the term acculturative stress and give examples of how it happens. It may also discuss what other problems can occur and what people can do to deal with accultural stress.

Exercise 22: Scanning for information, page 85

Scan Reading Selection 2 for the following items. On the blank, write the number of the paragraph where you find each item.

1 .1 .2 .2 .3 .3 .4 .4

Exercise 23: Locating sources, page 86

1. Ortega et al., 2000
2. Escobar & Vega, 2000
3. Neff & Hoppe, 1993; Salgado de Snyder, Cervantes, & Padilla, 1990; Zamanian et al., 1992
4. Short & Johnston, 1997
5. Ryder et al., 2000; Thompson et al., 2000

Exercise 24: Using academic words, page 87

1. d. 2. a. 3. b. 4. e. 5. c.

Exercise 25: Participating in group discussion, page 88

Answers will vary. Possible answers follow:

1. Factors that contribute to acculturative stress are language differences, differences in culture and customs, unemployment and/or lack of training opportunities, conflict with the dominant culture or other minority cultures.

2. The text says that acculturated Hispanic Americans tend to develop more psychological disorders than non-acculturated Hispanic Americans because they have more long-term economic hardships. They may be working in the same low-wage job for a long-time and thus become depressed at not advancing. The text also notes that economic hardships create other problems for families and these problems tend to erode traditional family structures. If a father can't make enough money for his family, for example, the mother and children may have to work. This changes relationships in the home.

3. Immigrants might lose contact with their cultural identity if they become too strongly attached to the new culture of their adopted country.

4. The text mentions that if there is economic opportunity, language proficiency, and a connection to a culturally-based social network, individuals will experience increased psychological adjustment.

Exercise 26: Reviewing comprehension, page 89

Possible answers follow:

1. The textbook defines stress as “pressures or demands placed upon an organism to adjust or adapt to its environment.” Another way to say that is that stress comes from the need to deal the pressures of life.
2. Stress comes from a number of causes. Some of them like everyday hassles such as dealing with traffic might be minor. Others causes such as changes in life (a divorce) or acculturation (moving to a new country) will bring more stress. Life-threatening situations such as an accident or major health problems can lead to serious problems or death.
3. A major cause of stress such as dealing with being a victim of a crime causes more difficulty than a minor cause such as getting caught in a rain storm because of the level of physical and psychological problems that might come from those experiences.
4. If we are not active, we tend to waste away both mentally and physically. Some stress can be helpful because it keeps a person “active, alert and energized”.
5. People with Type-A personalities are aggressive and impatient. They always want to win and to be ahead of everyone else. Examples will come from the people that students know who have this personality type.
6. According to the text, if we are aware of stress and its impact on us, we can manage it better. If we know that some situations or people are stressful, then we can avoid those situations or seek assistance on how to deal with the stress.
7. The stages of stress are the alarm stage, the resistance stage, and the exhaustion stage. In the alarm stage, we anticipate a stressful event and prepare to deal with it. In the resistance stage, people find ways to cope with ongoing stress. The body adjusts and brings more energy and resources to survive. In the exhaustion stage, people try to protect their vital resources, but they eventually wear out and experience diseases of stress or death.
8. The mice would have to be in a stressful situation. One might be to threaten them with a predator such as a cat. If a mouse think a cat might attack, it will be under stress. In an experiment, a researcher could spray cat scent in a maze. We might be able to see the avoidance of that part of the maze by the mice as evidence of stress. We might also see increased activity by the mice.
9. a. anthropology. b. anthropologist. c. anthropological d. anthro

Exercise 27: Writing reflections in your reading journal, page 90

Answers will vary as the exercise asks for students to rely on their personal experiences.

A. Reflections on learning

1. Look at titles, headings and sub-headings, read the first and last paragraphs and the first sentences of all paragraphs.
2. Previewing lets students see what is coming and to be ready for the information. It also helps students put vocabulary and concepts in context.
3. When a student understand the whole structure of a chapter, it’s easier to see how a part of it fits in the rest. For example, when a researcher talks about stress and its impact, it helps to know that the next item is what a person can do to deal with stress.

4. discovered, realized, and found
5. “ The alarm stage is accompanied by strong physiological and psychological arousal”.
6. Answers will vary
7. It is when a student gives the source for either a quotation or some information used when writing.

B. Reflections on Stress and Adaptation

1. Answers will vary, but students should relate the information in the text to their own personal experiences.
2. Students should discuss the elements of acculturative stress as defined in the text. It involves making cultural and economic adaptations due to moving to a new country and culture. Their experiences should exemplify those sorts of challenges and adaptations.

Exercise 28: Reviewing academic vocabulary, page 91

1. survive
2. designed
3. physical
4. trigger
5. responded to, normal
6. physical, psychological, induces
7. intense, stress, eventually

Chapter 3 : Business Management: Managing a New World

Note to teachers: Please read the Chapter Notes for this chapter before discussing the answers with your students.

Exercise 1: Participating in group discussion, page 93

The exercise asks students to relate the key ideas in the text with the management image. Answers will and should vary, but some connections student may make are as follows:

1. Change is indicated in the activity occurring in the photo. People are active in their discussions and actions. Students may note body language which includes eye contact and hand gestures. Change is also implicit in the diversity of those in the picture. The inclusion of women and minorities indicates management itself has changed from how it operated in the past.
2. The individuals are busy and are working together on solving a task. They seem attentive to one another and to be working quickly. No one seems inactive.
3. There may be a discussion of the customer going on, but we can't tell that by the managers we see.
4. Continuous improvement and learning can be implied as the managers are talking with one another and learning from this information sharing.

Exercise 2: Preparing vocabulary cards, page 96

The students should be creating word cards by using the information in this exercise along with additional information from the dictionary and the footnotes from Reading Selection 1. Instructors should check the content of the cards to assure accuracy.

Exercise 3: Completing vocabulary learning activities, page 99

Each of the activities is self-explanatory. As students will be generating different sentences and word use combinations, it would be impossible to provide answers or even potential answers. Instructors need to keep the word list available to cross reference words used together with their usages and definitions. The words in this exercise are as follows: process, achieve, environment, resources, components, interact, conclusion, involve, perceived, manipulative, objective, attained, challenging, goals, margin, approach, effectiveness, efficiency, experts, approximately, economics, factors, globalization, ethical, revolution, evolution.

Exercise 4: Previewing with a definition, page 100

Suggested, but not exclusive, answers follow:

1. The phrase "working with and through others" is the equivalent of bring about a result.
2. The goal of the management process is to bring about results in a changing environment.
3. Any numbers of business environments could be mentioned from small scale local entrepreneurs to multinational corporations. Factors which might make that environment change are globalization, the evolution of product quality, environmentalism, and ethical reawakening, and the Internet revolution.
4. Managers must build and maintain good interpersonal relationships as well as build and lead teams of workers.
5. Managers lead workers and teams which complete the goals of an organization. Thus, a manager's goals are achieved through the work of others.
6. Effectiveness has to do with getting a job done. Efficiency means doing the job with the minimum number of resources necessary to achieve the objective. They are opposite because in order to be effective, a manager will need to use resources but using too many resources means the manager is not efficient. When a balance of effectiveness and efficiency is achieved, a manager is doing his or her job correctly.

7. Any number of resources may be limited. Money is the primary resource as it can be used to purchase labor. Other critical resources might be time, the environment, and building space.

8. Students may use any of the suggested situations to answer this question. The following is one possible answer for a fast-food restaurant: In a fast-food restaurant, the manager must provide food to customers quickly and inexpensively. To do this, a manager will need a team of workers to receive orders, cook the food, deliver the food and collect money, as well as others to clean and manage the operation. If a manager does not have a sufficient workforce, the food will not be adequately and quickly delivered to the customer. A manager needs workers, but if too many are employed the cost of producing the food be more than the money collected from the customers. Thus, a manager must have the employees work quickly and do a number of tasks such as cashiering, cooking, and cleaning. With a well-trained and motivated workforce, a manager will be able to have a restaurant operate both effectively and efficiently.

Exercise 5: Matching definition parts to subheadings, page 101

A Definition of Management	List of Subtitles from the Chapter
Management is the process of working with and through others ...	1. Working with and Through Others
to achieve organizational objectives ...	2. Achieving Organization Objectives
in a changing environment.	5. Coping in a Changing Environment
Central to this process is the effective and efficient ...	3. Balancing Effectiveness and Efficiency
use of limited resources.	4. Making the Most of Limited Resources.

Exercise 6: Checking comprehension, page 107

Circle the correct response to answer these questions about the Reading Selection 1.

1. a. 2. c. 3. c. 4. d. 5. c. 6. c. 7. d. 8. a. 9. c. 10. c.

Exercise 7: Outlining to increase comprehension, page 109

1. Introduction—The relationship of effectiveness and efficiency.
2. Effectiveness and efficiency
 - a. Effectiveness = achieving objectives
 - b. Efficiency = Complete objective with few resources
3. Managers are responsible to balance effectiveness and efficiency
 - a. Avoid waste of resources
 - b. But not be stingy with resources

c. Get productivity improvements

Exercise 8: Developing understanding, page 110

Suggested answers follow:

1. Define effectiveness.

Effectiveness equals achieving an objective.

2. Define efficiency.

Efficiency means considering the resources used to achieve an objective.

3. What is the danger of being too effective?

Managers may be effective at too high a cost of resources.

4. What is the danger of being too efficient?

Managers who are too efficient may not use adequate resources needed to achieve an objective.

5. Describe another example of a business management situation in which a manager must balance effectiveness and efficiency.

Another example might be a clothing store. The objective of a manager of a clothing store is to retain and increase its profit. If the manager hires too large a sales staff, that manager will not be efficient and show a profit even though sales may increase. On the other hand, if there are too few sales men and women, customers may not be served and sales will decline which ensures a lower profit. The manager with a balanced approach will have enough sales staff available to meet customer demand, but not too many to be wasteful.

Exercise 9: Summarizing what you read, 111

Summaries naturally will differ. A suggested answer with the needed information follows:

Distinguishing between the relationship of effectiveness and efficiency is important and a never-ending dilemma for managers. Effectiveness involves promptly achieving a declared objective. Efficiency means measuring the means needed to do an objective against the real accomplishment. It is the job of managers to find a balance between effectiveness and efficiency. If a manager is too effective or too efficient, that manager will be mismanaging an organization. All managers must work to achieve productivity improvements, which is when there is a good relationship between input and output. (87 words)

My summary = 87 words

Exercise 10: Developing understanding, page 112

Suggested points to be raised for each question follow:

1. What is the relationship between effectiveness and efficiency?

- They are opposite terms. One means using the resources needed to achieve a goal while the other means not using too many resources.

- When the two are balanced by a manager, an organization is well managed.

2. How are the two terms similar, and how are they different?

- Both are measurements of good management.

- Both must be considered by managers

- Even though they are opposites (see point above), if only one or the other is used by a manager, the manager will not be successful.

3. What would happen if a manager ignored the balance between these two responsibilities?

- There would be too much of one or the other.

- Using too many resources would mean achieving an objective would be too expensive.

- Using too few resources would mean it may not be possible to achieve an stated objective.

4. As a student, you manage your own studying. How are you effective and efficient?

- Time management should be mentioned as a resource. If a student doesn't study a subject, for example, he or she may not know the information and thus fail a test. If that student, on the other hand, only studies for a test and ignores other assignments or classes, that student will not be successful.

- Other resources to be used efficiently and effectively might be sleep, health, study groups, and strategies. A student who uses effective strategies (previewing and reviewing, for example) will be more efficient and remember information longer.

Exercise 11: Practicing with paraphrasing, page 114

For this exercise, you will write a paraphrase of the author's ideas found in paragraph 11. Follow the steps as indicated.

Step 1: First, reread the paragraph. It is copied here for you.

Balancing Effectiveness and Efficiency

Distinguishing between effectiveness and efficiency is much more than an exercise in semantics. The relationship between these two terms is important and it presents managers with a never-ending dilemma. Effectiveness entails promptly achieving a stated objective. Swinging a sledgehammer against the wall, for example, would be an effective way to kill a bothersome fly. But given the reality of limited resources, effectiveness alone is not enough. Efficiency enters the picture when the resources required to achieve an objective are weighed against what was actually accomplished. Although a sledgehammer is an effective tool for killing flies, it is highly inefficient when the wasted effort and smashed walls are taken into consideration. A fly swatter is both an effective and an efficient tool for killing a single housefly.

Step 2: Review the first part of the outline you completed in Exercise 7. It is copied here for you.

1. Introduction—The relationship of Effectiveness and Efficiency

2. Effectiveness and Efficiency

- a. Effectiveness—achieving objective
- b. Efficiency—Complete job with few resources

Original word	Synonym
distinguishing between	understanding the difference
important	essential
never-ending	ongoing
dilemma	situation
entails	requires
promptly	quickly
achieving	accomplishing
stated	declared
objective	goal
achieve	accomplish
against	in contrast to
actual	Real

Management Defined—A Paraphrase

A possible answer follows:

Managers must always be able to balance two key concepts while managing organizations. These essential concepts are effectiveness and efficiency and it is essential to understand the differences between them . Effectiveness means being able to quickly accomplish a goal. In contrast to that concept efficiency requires that the goal be realized with the lowest use of resources possible. In a fast food restaurant, for example, a manager must deliver food quickly, with good quality, and at a low price. If the manager has too many employees, however, the food may come quickly and with good quality, but it will cost too much. If the manager has too few employees, the food may not be delivered quickly. In either situation, the manager would not be reaching the declared goal. Successful managers learn to balance effectiveness and efficiency.

Exercise 12: Writing short-answer responses, page 116

Possible answers follow:

Working with and Through Others

1. Of the many skills that managers must, the ability to work with and through others is probably the most important. Managers need others to accomplish the goals of an organization. These managers must be able to have successful personal relationships and be able to build and lead a team. If not, they will be viewed very negatively by others. That is why managers who do not have social skills do not have successful careers.

Achieving Organizational Objectives

2. An objective is an achievable target or goal that an organization wants to reach. Any organization needs to have clear objectives so it can use its resources for a purpose. An example is the Nissan Company which has the “180” plan. 1 means they want to sell 1 million vehicles in a year. 8 means they want to have an 8% profit margin, and 0 means they don’t want any debt.

Balancing Effectiveness and Efficiency

3. Effectiveness and efficiency are opposite concepts, yet both must be present for an organization to be well-managed. That is why “a never-ending dilemma” between these concepts exists for managers.

Making the Most of Limited Resources

4. Managers have to use resources wisely for a number of reasons. If they waste resources, they will not be efficient managers. Additionally, the resources that the world has to use are limited. The world is adding thousands of people every hour so managers need to make more use of the limited resources that exist.

Coping with a Changing Environment

5. Managers must deal with the follow critical changes in our world: globalization, the evolution of product quality, environmentalism, an ethical reawakening, the internet and e-business revolutions. In all of these changes, a manager must know about and be able to deal with a world that is more connected and more competitive.

Overall – A Summary

6. Managing an organization is an ever increasing challenging job. A manager must be able to lead people with efficiency and effectiveness in order to achieve stated objectives. The manager must know that the world is increasingly connected and competitive and therefore must be able to make the best use of limited resources to successfully reach the organization’s goals.

Exercise 13: Previewing and reviewing to connect, page 118

In discussion groups, students should explore the relationship of the information in paragraph 12 to the information in Figure 1.1. Some possible connections are as follows:

- Both are about the balance needed between effectiveness and efficiency.
- The information in paragraph 12 tells us that “too much emphasis in either direction leads to mismanagement,” but the information in the figure tells us what kind of mismanagement will occur.
- The figure also shows visually what an imbalance and balance would look like and defines those situations.

Exercise 14: Understanding figures with graphic elements, page 120

Part 1

- 1. According to this figure, what has been achieved?** The job gets done.
- 2. What is not good?** Limited resources are wasted.

3. What is out of balance in this figure? Both effectiveness and efficiency are out of balance because of too much emphasis on effectiveness.

Part 2

1. According to this figure, what happened to the achievement?

The job does not get done.

2. What does “available resources are underutilized” mean?

The resources that could be used to do the job, money, time, and labor for example, are not used enough to get the job done.

3. What is out of balance in this figure?

Both effectiveness and efficiency are out of balance because of too much emphasis on efficiency.

Part 3

1. According to this figure, what has been achieved?

The job gets done and no resources are wasted.

2. Why has achievement occurred?

The achievement occurred because resources were used to get the job done, but not too many were used to be wasteful.

3. What is in balance in this figure?

Both effectiveness and efficiency are balanced.

4. What more did you learn from Figure 1.1 that was not covered in Reading Selection 1?

The figure tells us in clear language about getting the job done is because a balance between effectiveness and efficiency exists. It also shows that information in a visual way so many people can understand the point.

Exercise 15: Previewing a title, page 124

1. Diversity

Definition: Being different from one another. In society, it means having people with different racial, ethnic, and religious backgrounds living and working together.

Synonym: Variety or multiplicity

2. Boosts

Definition: To increase; raise

Synonym(s): increase or raise

3. The bottom line

Definition: The line in a financial statement that shows net income or loss.

Synonym(s): The final result

4. The Allstate Insurance Company raised the final result of its financial statement by increasing the variety of people who work for the company.

5. I expect to read about how the Allstate Insurance Company increased its profits by hiring a diverse workforce.

Exercise 16: Classifying business-related expressions, page 127

This business expression

is most closely relate to the following:

1. strategic priority (**plan**)
2. customer satisfaction (**profit**)
3. increased sales (**profit**)
4. corporate objectives (**plan**)
5. drive levels of satisfaction (**profit**)
6. take an integrated approach (**process**)
7. a compelling business strategy (**plan**)
8. increase a customer base (**profit**)
9. daily operations (**process**)
10. penetrate day-to-day functions (**process**)
11. proactive retention strategy (**plan**)
12. rigorous feedback mechanism (**process**)
13. community outreach (**plan**)
14. boosted market share (**profit**)
15. accelerate urban revitalization (**profit**)
16. accelerate customer acquisitions (**profit**)
17. shorten acquisition curves (**profit**)

Exercise 17: Discussing in small groups, page 129

1. They wanted to increase levels of employee and customer satisfaction.

2. A social conscience program is one that is done mainly or purely because it is the right thing to do for moral reasons. A business strategy is a process with a goal in mind that will bring a profit to a company. In this case, the company chose to increase its efforts with diversity as a business strategy, but that strategy is also morally positive.

3. Examples of business practices are product innovation and decision making. By deciding to incorporate differences into practices such as these, Allstate made a decision to consider differences whenever they utilized a business practice. With product innovation, for example, the company might consider the cultural practices of different ethnic groups when designing a package of insurance coverage.

4. Allstate recruits for diversity and operates a proactive retention strategy. Additionally it offers training and education, a rigorous feedback mechanism and stays involved in its community through outreach.

5. The company continuously seeks to learn from customers. It also engages in outreach programs. This means it contributes to the ethnic, local, and other organizations. Allstate also works with community groups through a Neighborhood Partnership Program to speed up urban revitalization projects.

6. They have experienced better customer satisfaction, increased market share and increased sales.

Exercise 18: Investigating diversity in corporate America, page 129

Answers will vary depending on the websites chosen and when the students complete this activity. Companies continually update their websites, so one day's answer could be different than that of the next. Instructors may want to have students print selected pages to demonstrate why they answered the questions as they did.

Exercise 19: Reviewing comprehension, page 130

Possible answers may include the following

1. The primary goal of management is to lead an organization in reaching its objectives.
2. Managers achieve their goals with and through others who work for an organization.
3. A study cited in the text identified the following dangers: problems with interpersonal relationships, failure to meet business objectives, failure to build and lead a team, and an inability to change and adapt during a transition.
4. Some standard principles of management are that managers must with and through others, they must work towards achieving their objectives, that they have to be able to balance effectiveness and efficiency, and that they must be able to cope with a changing environment. In order to be effective a manager must be able to achieve a stated objective.
5. A business manager must constantly deal with change. Some areas of are in an organization's social, political-legal, economic, and technological environments. Specific areas mentioned in the text deal with globalization, the evolution of product quality, environmentalism, ethics, and the internet and e-business revolution.
6. If business managers do not keep up with change they will not be successful.
7. Answers will vary here, but students should judge the effectiveness of a manager against the principles described in the chapter.

8. Allstate took on the additional challenge of responding to the challenges and opportunities of a diverse workforce and customer client base. This decision by the core management many their situation unique and challenging.

9. What is your experience in working with a diverse group of colleagues and customers? What experience do you have in working with the community? If someone came into the office to buy insurance or file a claim and didn't speak English, how would you serve that person? Please define diversity⁶

10. Some managers may not want to deal with the challenges of dealing with a diverse workforce or diverse customers. They may see these situations as too challenging rather than as opportunities for expanding market share, expanding sales, and as assisting the community.

11. If an manager is from a diverse group, he or she might feel more comfortable in working for Allstate. Also, he or she might feel that it is satisfying to be working for a progressive company which reaches out to its employees and community. Finally, the manager may find the company is more successful because of its policies to serve its employees and community.

12. The pluses are that the employee is working for a progressive company and increasing its business effectiveness. The minuses are that it is taking on a challenge that other companies avoid.

13. Answers will vary, but students should reflect on the approach Allstate takes and relate it to their own experiences.

Exercise 20: Responding to questions, page 131

1. Students should describe the steps outlined in the chapter. This involves choosing new words, writing them on the cards, using the word as it appears in the text, giving an appropriate definition on the other side of the card along with a collocation.

2. Answers will vary here. Students should reflect on their on their experience of creating and using the vocabulary cards.

3. Answers will vary here also, but students should reflect on the principles of management as presented in the chapter and how possessing that basic understand will prepare them for reading about the topic in the future.

Reflections on Management

1. There are five components: (1) working with and through others, (2) achieving organizational objectives, (3) balancing effectiveness and efficiency, (4) making the most of limited resources, and (5) coping with a changing environment.

2. Students should reflect on the definition given and relate it to their own increased understanding of management. They should discuss the balance that a manager must achieve between effectiveness and efficiency.

3. Students may mention the challenges of working with a diverse set of employees and customers. There might be some concern for conflict between those with different practices and values. Additionally, managers in that situation will have to initiate change, which is always challenging.

Exercise 21: Reviewing academic vocabulary, page 133

1. c. 2. a. 3. d. 4. b. 5. a.

Chapter 4: Nutrition: Global Obesity

Exercise 1: Previewing nutrition (textbook pg. 135)

Nutritionists study...

Basic nutrients in food

Worldwide hunger and malnutrition

Vegetarianism

Food labels on processed food

Anatomy and physiology

Exercise programs

Exercise 2: Examining eating habits (textbook pg. 136)

Asian Diet Pyramid: contains less meat and poultry and more rice and noodles than the Latin American Diet Pyramid.

Latin American Diet Pyramid: contains more meat, poultry. In both pyramids, different types of beverages, fruits and vegetables are shown.

Vegetarian Diet Pyramid: contains no meat. Wording is different. Instead of “daily,” “weekly,” or “monthly,” the words “sparingly,” “moderately,” “generously” and “liberally” are used to show amounts.

Exercise 4: Focusing on key terms, page 141

1. obese 2. chronic 3. undernourished / diabetes 4. respiratory / infertility
5. hormonal 6. puberty: 7. obesity 8. Obesity, chronic 9. clinical, obesity

Exercise 5: Asking questions before reading, page 143

2. Why are so many people overweight? What ages are overweight?
3. What's the difference between these two terms?
4. Where are the most obese people?
5. How fat is excess body fat?

6. What are people doing now? Is it working?

Exercise 6: Previewing the text introduction, page 144

1. •All over the world, many people are overweight or obese.
 - Overweight and obesity cause many health problems.
 - The reason for this is overeating and not exercising.
2. •Obesity will be a major concern worldwide.
 - Obesity will kill more people.
 - People may learn to reduce sugar and saturated fat, and increase exercise.

Exercise 8: Checking Comprehension of Sentences, page 150

1. False, Obesity often exists in populations that also have undernourished people.
2. False, The increase in obesity is occurring faster in developing countries than in developed countries.
3. True
4. False, Globally, there is an decrease in physical labor.
5. True
6. False, If a person suffers from under-nutrition, and then becomes obese as an adult, he or she usually has more serious cases of hypertension, heart disease, and diabetes than another person who never experienced under-nutrition.
7. False, Since 1980, the number of overweight children in the U.S. has doubled while the number of overweight adolescents has tripled.
8. True

Exercise 9: Outlining the Major Points, page 151

I. Obesity and Overweight

- A. One billion overweight, 300 million obese worldwide
- B. Obesity coexisting with under-nutrition
- C. Obesity: a complex condition affecting all ages, socioeconomic groups
- D. Causes: increased consumption of energy-dense foods high in saturated fats and sugars, and reduced physical activity.
- E. Rates tripled since 1980 in some areas of North America, the United Kingdom, Eastern Europe, the Middle East, the Pacific Islands, Australasia and China.

F. Risks: serious diet-related chronic diseases, including type 2 diabetes, cardiovascular disease, hypertension and stroke, and certain forms of cancer; increased risk of premature death, to serious chronic conditions that reduce the overall quality of life.

II. Why is This Happening?

- A. profound changes in society and in behavioral patterns of communities over recent decades.
- B. Economic growth, modernization, urbanization and globalization of food markets are just some of the forces thought to underlie the epidemic.
 - 1. As incomes rise and populations become more urban, diets high in complex carbohydrates give way to more varied diets with a higher proportion of fats, saturated fats and sugars.
 - 2. At the same time, large shifts towards less physically demanding work have been observed worldwide.

III. How Do We Define Obesity and Overweight?

- A. The prevalence of overweight and obesity is commonly assessed by using body mass index (BMI), defined as the weight in kilograms divided by the square of the height in meters (kg/m^2)
- B. A BMI over $25 \text{ kg}/\text{m}^2$ is defined as overweight, and a BMI of over $30 \text{ kg}/\text{m}^2$ as obese.

IV. How Does Excess Body Fat Impact Health?

- A. Obesity leads to negative effects on blood pressure, cholesterol, and other areas of body.
- B. Other non-fatal and life-threatening health problems can result from obesity. C. The chances of getting diabetes and hypertension are higher.
- D. Obesity also increases the chances of getting cancer, arthritis, and other diseases.

V. The Extent of the Problem

- A. Currently more than 1 billion adults are overweight – and at least 300 million of them are clinically obese.
- B. Current obesity levels range from below 5% in China, Japan and certain African nations, to over 75% in urban Samoa.

VI. What Can We Do about It?

- A. Effective weight management
- B. Healthy diets
- C. Regular physical activity
- D. Creating supportive population-based environments through public policies that promote the availability and accessibility of a variety of low-fat, high-fiber foods, and that provide opportunities for physical activity.
- E. Promoting healthy behaviors to encourage, motivate and enable individuals to lose weight

F. Mounting a clinical response to the existing burden of obesity and associated conditions through clinical programs and staff training to ensure effective support for those affected to lose weight or avoid further weight gain.

Exercise 10: Identifying Noun Phrases, page 153

1. Obesity is a complex condition, with serious social and psychological dimensions...
2. Increased consumption of more energy-dense, nutrient-poor foods with high levels of sugar and saturated fats...have led to obesity rates that have risen three-fold since 1980...
3. Economic growth, modernization, urbanization and globalization of food markets are just some of the forces thought to underlie the epidemic.
4. Moves toward less physical activity are also found in the increasing use of automated transport, technology in the home, and more passive leisure pursuits.
5. The distribution of BMI is shifting upwards in many populations.
6. An estimated 17.6 million children under five are estimated to be overweight worldwide.
7. Approximately 80% of people with diabetes are type 2.
8. Effective weight management for individuals and groups at risk of developing obesity involves a range of long-term strategies.

Exercise 11: Writing Sentences with noun phrases, page 154

1. A major cause of obesity is overeating.
2. There are serious diseases associated with obesity.
3. People in many countries are seeing less physical labor.
4. There are more overweight children now than ever before.
5. The prevalence of obesity, worldwide, is becoming more serious.
6. It is difficult to control weight management.
7. Daily physical activity is recommended for those who wish to lose weight.
8. There should be public policies to make healthy foods more available to average people.

Exercise 15: Choosing correct word forms, page 157

1. globally
2. consumption
3. consequences
4. society
5. complex / varied

6. assessment
7. distribution
8. adulthood
9. extends
10. debilitating

Exercise 16: Asking questions before reading

News Report 1:

What is the link between more money and more obesity?

How is affluence affecting children's health?

News Report 2:

What does it mean to tackle Asia's waistline?

Where in Asia?

How does acupuncture help obese people?

Exercise 17: Expressing main ideas, page 162

Possible main idea sentences:

1. The news report, "More money, more obesity in children," states that child obesity is increasing in India, especially in wealthier families.
2. The news report, "Tackling Asia's growing waistline," reports that obesity is rising among Chinese children.

Exercise 18: Analyzing statements and statistics, page 163

Statement	Statistical supporting sentences
"[Being overweight] is possibly because of decreased physical activity..."	<p>"Only 19 per cent of the school children were found to be engaged in outdoor activities in our study, while 90 per cent of the obese children did not engage in any outdoor activity at all, Kapil said.</p> <p>Only 19 per cent of all of the children were engaged in outdoor activities - 38 per cent entertained through TV, 21 per cent through computers, 10 per cent by music and eight were engaged in reading.</p>
'The phenomenon is prevalent in other parts of the world as well...'	<p>During the past 20 years, the prevalence of obesity among children and adolescents has doubled in the U.S., the study said.</p>

	<p>According to the statistics available with the U.S. National Centre for Health‘</p> <p>nearly 15 per cent of adolescents are overweight (when ratio of weight and height is between 25 and 30) or obese (when this ratio is more than 30), it said.</p> <p>The paper said the maximum prevalence of obesity was found during the</p> <p>pubertal period, between 10 and 12 years.</p>
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Exercise 20: Participating in group discussion, page 166

1. It makes sense. If people have more money, they eat more fast food, which contains fats and sugars.
2. In nuclear families, parents may work and be too busy to cook or pay attention to what their children eat.
3. These factors probably exist in any country where people have enough money to eat out and people are doing less physical activity.
4. The “fat farm” seems effective.
5. Meng’s formula makes good sense – eat moderate amounts and exercise.

Exercise 23: Identifying audience and purpose in a reading, page 168

- The writer’s audience is the average American population.
- The audience is specific to America, but general within the American population.
- The author’s purpose seems to be to discuss the USDA’s Food Guide Pyramid.
- The author’s purpose seems to be to inform, not persuade.

Exercise 24: Outlining Major Points and Support, page 176

I. U.S. Food Guide Pyramid

- A. The pyramid serves as a visual adaptation of the U.S. Dietary Guidelines for Americans.
- B. You can see it in nutrition education materials for children and adults, but also on grocery bags, food packages and in the media.

II. Food Guide definition: tools used to communicate complex scientific information in a consumer-friendly way.

III. History of U.S. food guides

- A. 1916: consisted of five food groups—milk and meat; cereals; vegetables and fruits; fats and fat foods; and sugars and sugar foods.

B. 1940s: food guide listed ten food groups, including water and eggs. Vegetables and fruits were split into three individual groups.

C. 1950s: these groups were trimmed to four food groups

D. "Basic Four": four food groups—milk, fruit and vegetable, bread and cereal and meat groups

E. 1980: work began on a new food guide graphic to reflect the latest science on diet and health.

F. U.S. ethnic and cultural groups: U.S. Food Guide Pyramid can be translated to reflect the customs of numerous ethnic and cultural groups within the United States.

IV. Pictures from around the world

A. Different graphic shapes: Rainbows, circles, pyramids, and even a chalice¹ are used to represent the "optimal" diet.

B. Common messages

1. Most guides attempt to illustrate the food groups' optimal proportion of the total diet

2. Grains: should comprise the largest proportion of the diet.

C. Wheel or dinner plate design is a popular graphic that represents the total diet, with each section depicting a food group and its relative proportion to the total diet,

used in the United Kingdom, Germany and Norway.

D. Japan: depicts its "optimal" diet through the use of the numeral six as the basis of its food guide to remind consumers of the six food categories.

E. Canada: Canada's Food Guide to Healthy Eating is a four-banded rainbow, with each color representing one of its four food groups.

1. Large outer arcs: of the rainbow are the grain products and fruits and vegetables.

2. Smaller inner arcs: make up the milk products and meat and meat alternatives that should make up a smaller amount of a healthy eating plan.

F. Israel: chalice graphic illustrates the importance of water for overall health by placing "water" at the top and largest section of the chalice

*chalice: a cup or bolet

G. South Africa: food guide graphic contains the least number of food groups and organizes foods in a unique way-according to the foods' "function" in the body.

1. Group 1: "Energy Food," and includes margarine, grains, porridge and maize.

2. Group 2: "Body Building Food" and includes chicken, beans, milk and eggs.

3. Group 3: "Protective Food," to protect your body from illness and includes cabbage, carrots, pineapples and spinach.

V. Pictures paint 1,000 words

A. Heart, checkmark or apple: are often used on restaurant menus to denote choices that meet specific nutrition or health guidelines.

B. Primary role of food guides: to communicate an optimal diet for overall health of the population.

VI. Key concepts in eating patterns

A. Total diet, rather than nutrients or individual foods should be addressed

B. Dietary guidelines need to reflect food patterns rather than numeric nutrient goals

C. Various dietary patterns can be consistent with good health

Exercise 25: Identifying audience and purpose, page 178

Selection 3 is probably written for readers who are (already very / not particularly) knowledgeable in nutrition. The reading is directed at (men / women / both men and women) of (all / older / younger) ages.

Purpose

Since Selection 3 appeared in Food Insight, the newsletter of the International Food Information Council, the writer's main purpose is probably to (inform / persuade) readers about the different types of food guidelines in the world. The writer may also have attempted to (inform / persuade) readers to eat healthy food.

Exercise 26: Drawing inferences from reading, page 179

1. The U.S. government thought people were having a hard time understanding so many food groups.
2. People from developing countries worry about malnutrition.
3. Water is in short supply in Israel.
4. Obese people have problems with their self-image.
5. Today's children have many more interesting indoor activities to do.
6. The doctor has a negative attitude about children getting pocket money.

Exercise 27: Participating in group discussion, page 181

1. Food guides are supposed to be easy to understand because they graphically represent good eating habits. Answers will vary.
2. Answers will vary.
3. Answers will vary. Non-pyramid food guides described in Reading Selection 3 include: rainbow (Canada), wheel or dinner plate (United Kingdom, Germany, Norway), chalice (Israel), pagoda (China).
4. Answers will vary. The U.S. Food Guide Pyramid was revised in 2005. Here's the new pyramid, which includes a graphic for exercise, and simplified sections. A list below the graphic explains what the colors mean.

orange - grains green - vegetables red - fruits blue - milk and dairy products purple - meat, beans, fish, and nuts yellow - oils

5. Answers will vary.

Exercise 29: Comprehending academic words, page 183

1. groups
2. choices
3. represent
4. signs
5. changed
6. special
7. Even though
8. base
9. includes
10. understanding of

Exercise 30: Synthesizing ideas from different sources (textbook pg. 184)

1. Reading Selection 1 because it presents facts, statistics, and medical data to show the ill effects of obesity.
2. Countries/areas listed include the U.S., North America, Europe, Thailand, Japan, China, some Latin American, North African and Pacific Island countries (including Samoa). Student answers will vary depending on their background.
3. In Reading Selection 2, the news reports say that obesity occurs because of increased affluence, greater consumption of fatty and sweet foods, and less physical activity. These reasons jibe with those presented in Reading Selection 2. Answers will vary.
4. Answers will vary. Both consumption of fatty and sweet foods and low physical activity are lifestyle habits that are difficult to change.
5. The food guides are designed to visually represent food groups and the amounts that people should eat. As such, they are meant to be easy to understand. Answers will vary as to whether the guides actually help people eat more wisely.

Exercise 31: Comprehension review, page 185

1. Over 1 billion people are overweight and 300 million are obese.
2. Four major health risks that obesity and overweight pose include type 2 diabetes, cardiovascular disease, hypertension and stroke, and certain forms of cancer

3. Four major reasons for the global increase in obesity include increased consumption of more energy-dense, nutrient-poor foods with high levels of sugar and saturated fats, and reduced physical activity. Economic growth, modernization, urbanization and globalization of food markets are just some of the forces thought to underlie the epidemic.
4. The prevalence of overweight and obesity is commonly assessed by using body mass index (BMI), defined as the weight in kilograms divided by the square of the height in meters (kg/m^2).
5. Less serious health effects of obesity and overweight include respiratory difficulties, chronic musculoskeletal problems, skin problems and infertility.
6. Three main strategies for effective weight management, according to Selection 1, are effective weight management, regular physical activity, and healthy diet.
7. In Selection 2, children in high or high-middle income groups in India are becoming more overweight.
8. Researchers found the rise in child obesity in India was caused by decreased physical activity, sedentary lifestyle, and altered eating patterns with more fat content in the diet.
9. In the CNN report from China, acupuncture treatments, counseling on how to change eating habits, and physical exercise were being used to overcome obesity.
10. The CNN report said increased obesity among youths in China may be caused by adults spoiling children by an economic boom. Twenty-five years of China's economic boom have brought good life, sedentary lifestyles and fat-laden food – swelling people's waistlines.
11. According to Selection 3, the overall purpose of a food guide is to graphically communicate complex scientific information in a consumer-friendly way.
12. In the history of U.S. food guides, the “Basic Four” stands for four food groups— milk, fruit and vegetable, bread and cereal and meat groups.
13. According to food guides around the world, grains should comprise the largest proportion of the diet.
14. The United Kingdom, Germany, and Norway use wheel-shaped plates as their food guide. Israel uses a chalice. Canada uses a rainbow.
15. Israel's food guide is unique because it includes water as a food to consume.
16. South Africa's food guide is unique because it has the fewest number of food groups – three.
17. One key concept for dietary patterns, according to Selection 3, is that total diet, rather than nutrients or individual foods should be addressed.

Exercise 32: Academic vocabulary review, page 186

1. a) consumption b) consumers
2. a) adult b) adulthood
3. a) assessed b) assessment
4. a) maintenance b) maintain

5. a) symbolism b) symbols

Chapter 5 : Genetics: The Thread of Life

Exercise 1: Participating in group discussion, page190

Pair A:

Similarities: Photograph 1 is a domestic cat. Photograph 2 is a lion. Both belong to the feline family. Both have ears, nose, eyes, whiskers, four legs, fur.

Differences: Domestic cat is tame, small; lion is large, wild.

Photograph B:

Similarities: Photograph looks like family. Mother, father, and children share similar hair, eye color, face shapes, skin coloring.

Differences: Mother has wider mouth, lighter skin than father. Children have round faces like mother. Father has longer face, broader nose.

Pair C:

Similarities: Both photos show flowers. Both have stems, petals, center of flower.

Differences: Photograph 4 is a rose. Color of flower is different. Stem has leaves, thorns. Center of flower is smaller. Petals are shaped differently. Photograph 5 is a daisy. It has no visible leaves, thorns.

Pair D:

Similarities: Both photos show living beings, animals. Both have eyes, ears, nose, mouth, neck, limbs (not visible in Photograph 7). Both have hair on bodies.

Differences: Man in photograph 6 has mono-colored skin, less body hair, shorter neck than giraffe in photograph 7. Man is bipedal. Giraffe is quadrupedal. Giraffe has more hair, multi-colored, long neck, antlers on head, longer nose.

Exercise 2, page 193

[This is a discussion exercise. As such, answers are not included for questions that ask for subjective answers].

1. The term individual refers to one human being.

3. Cell = "(2) the cells making up the body of that individual".

Chromosome = "(3) the chromosomes located within the nucleus of those cells"

Gene = "(4) the genes comprising segments of each chromosome"

Nucleotide pairs = "(5) the nucleotide pairs that form the biochemical building blocks for the genes"

4. Possible answer: The study of genetics and heredity is more easily done at the individual level because genetic and hereditary traits can be observed in an individual. At smaller levels, these traits are not observable by the eye. Scientists must be trained to find similarities and differences in cells.

5. Possible answer: Scientists are cloning animals and producing hybrid plants. They are also enhancing the traits of plants and animals through selective breeding. In the future, scientists could begin to clone more animals, including humans.

Exercise 4, page 194

1. molecules
2. genes
3. chromosomes
4. genome
5. nucleotides
6. DNA
7. organisms
8. species
9. ancestry
10. evolved

Exercise 5: Previewing the text, page 196

1. “Genetics and Heredity” refer to the genes and traits that are passed from organisms from generation to generation. The reading will probably tell about this subject.
2. a. “Principles of Hereditary Transmission” = laws of how traits are passed
b. “The Building Blocks of Heredity” = parts of the body that carry traits passed on from ancestor to descendent
3. a. Answers will vary.
b. Answers will vary.
4. Key terms: genotype, phenotype, alleles, gametes, chromosomes, human genome.

Exercise 6: Reading the text introduction, page 197

1. The passage of genes from one generation to the next and the extent to which genetic similarity leads to similar traits.
2. Identical twins are genetically identical and a good way to measure how much environment and other factors affect personality.

3. Their voices are alike and they share common interests, but Jasmine is more impulsive and less sensitive, while Alyssa is more cautious and helpful.
4. Being identical twins, they're bound to be similar, but even though they live together they've had different experiences through their first five years.
5. Answers may vary.

Exercise 7: Outlining major points, page 203

I. Principles of Hereditary Transmission

- A. Genotype means the genetic factors that a person is born with.
- B. Phenotype is a person's observable, measurable features, characteristics and behaviors.
- C. Gregor Mendel studied heredity.
 1. His theory: that hereditary characteristics are determined by pairs of particles called factors. These characteristics were later termed genotype.
 2. Alleles are different forms of the same gene.
 3. Mendel: The basic principle for genes transfer from generation to generation is that offspring randomly receive one member of every pair of genes from the mother and one from the father.
- D. Biologists discovered chromosomes, which are long, threadlike structures in the nucleus of nearly every cell in the body.
 1. Early 1900s: Several researchers independently hypothesized that genes are located on chromosomes.
 2. 1953: James Watson and Francis Crick deciphered the structure of chromosomes.
 3. 1956: Researchers had documented the existence of 46 chromosomes in normal human body cells.
 4. Research today is mapping the human genome, which is the set of genes and sequencing of complex molecules that make up the genetic information contained in all 46 chromosomes.

II. Building Blocks of Heredity

A. Genetic mechanisms

1. Every living thing is made of cells.
2. Chromosomes are located in the nucleus.
3. Genes are located within the strands of chromosomes.
4. Genes contain four chemical building blocks, or nucleotides.
 - a. Each nucleotide has one of four nitrogen-based molecules: adenine, thymine, cytosine, or guanine.
 - b. Nucleotides connect to form a long, ladderlike structure called DNA, or deoxyribonucleic acid.

B. Each human has 23 pairs, or a total of 46 chromosomes. One member of the pair of genes on a chromosome comes from the mother, and the other from the father.

Exercise 8: Using visual aids in a textbook, page 205

1. A woman. All humans are made up of cells. Paragraph: 8
2. A cell. The caption tells the parts of the cell. Paragraphs: 6, 8
3. The drawing shows two objects because chromosomes exist in pairs. Paragraphs: 6, 8
4. A gene. Paragraphs: 6, 8
5. Answers may vary.
6. Answers may vary.

Exercise 9: Analyzing paraphrases, page 207

Students should underline these sections, then draw lines connecting the sections of the original sentence and its paraphrase:

Original sentence Paraphrase

2. genotype a person's constant, inherited genetic endowment.
2. Genotype means what we get from our genes
2. phenotype, an individual's observable, measurable features, characteristics, and behaviors.
2. phenotype refers to the characteristics and behavior that we display.
3. A given phenotype is the product of
3. A person's phenotype comes from
3. the genotype
3. her genes
3. an individual's experience.
3. experience.

Exercise 10: Identifying paraphrases, page 208

1. F 2. C 3. A 4. D 5. B 6. H 7. E 8. G

Exercise 11: Reading citations in a text, page 210

Footnote numbers: 3, 7, 5, 4

Exercise 12: Participating in group discussion, page 211

1. Genotype refers to what you inherit. Phenotype is your observable characteristics.

- 2. A. A person's underlying genetic blueprint
- B. Phenotype is influenced by whatever characteristics are specified.
- C. The allele is a heterozygous genotype which is apparent in the phenotype.
- D. The recessive allele is an allele that is not apparent.
- E. A. The allele for type A is dominant.
- F. AO. A.

Exercise 15: Understanding key terms in genetics, page 216

- 1. traits 2. offspring 3. allele 4. recessive
- 5. gametes 6. phenotype 7. genotype 8. genetic makeup

Exercise 16: Previewing the text, page 218

- 1. Where do we come from and how did we get here?
- 2. That all living humans can trace their ancestry to a common woman who lived in Africa about 150,000 years ago.
- 3. How the human race spread across and populated the globe

Exercise 17: Key terms in science, page 218

- 1. DNA
- 2. conception
- 3. mitochondria
- 4. mutations
- 5. fossils - interbreeding

Exercise 18: Main idea sentence, page 224

Possible main idea sentence: The main point of Selection 2, "The Real Eve," is that new scientific tools are able to better trace the routes of human migration than ever before and reveal that all humans are closely related.

Exercise 19: Outlining the reading selection, page 225

I. Introduction and Main Idea

The main point of Selection 2, "The Real Eve," is that new scientific tools are able to better trace the routes of human migration than ever before and reveal that all humans are closely related.

II. Digging Through Genes

A. Richards' research extended the work of scientists over the past two decades who have been reconstructing human origins by studying snippets of DNA from tiny cellular structures called mitochondria.

B. Working from the assumption that genetic mutations occur more or less regularly over time, scientists can compare two samples of mtDNA, noting where they have shared mutations and where they do not share mutations, and resolve the time in prehistory when the peoples' ancestral populations diverged.

C. In the same way, the mtDNA from Eve merely acts as a tracer that links all present day humans to a single population of ancient humans, estimated at 10,000 people or so, who lived in Africa several hundred thousand years ago.

III. The Climate Connection

A. While Richards' genetic research suggests that only one branch of ancient humans migrated out of Africa to give rise to modern populations, research on ancient climate changes helps pinpoint the time when this migration must have occurred, argues Oppenheimer.

B. It was only after the climate shifted again some 50,000 years ago, creating strong monsoons⁹ that turned what was once desert into the lush growth of the so-called "Fertile Crescent" stretching from the Arabian Gulf to Turkey, that humans had the pathway to begin the push into what is now modern-day Europe.

C. Indeed, nearly all Europeans — and by extension, many Americans — can trace their ancestors to only four mtDNA lines, which appeared between 10,000 and 50,000 years ago and originated from South Asia.

IV. The Incredible Journey

A. The final stage in the human odyssey¹⁰ was again triggered by climate change: The genetic evidence suggests that as the seas retreated during the buildup of the polar ice caps 20,000 to 25,000 years ago, humans crossed over the bridge of land — now underwater — that connects what is now Siberia and Alaska, says Cambridge University's Peter Forster.

B. Despite the sweeping saga of migration and branching of the human family tree over the past 7,000 generations since "Eve," perhaps the most startling result of the new picture of human evolution is how very closely related are all humans.

C. Conclusion: In the quest¹² to find ancient family ties, one need look only to one's neighbor — or to the far end of the globe.

Exercise 20: Identifying paraphrases, page 226

1. 2nd sentence
2. 1st sentence
3. 2nd sentence
4. 2nd sentence
5. 1st sentence

Exercise 21: Paraphrasing major point sentences in your outline, page 228

Possible paraphrases of sentences from outline:

I. A. The main point of Selection 2, "The Real Eve," is that new scientific tools can trace the routes of human migration better and show that all people are related.

II. A. Richards continued the work of scientists over the past 20 years who have been reconstructing human roots by studying DNA from mitochondria.

B. Scientists know that mutations occur regularly, so they can compare two samples of mtDNA and figure out where they have shared mutations and where they do not share mutations. This can tell them the time in prehistory when the peoples had the same ancestors.

C. The mtDNA from Eve is like a tracer that connects all present-day humans to a single population of ancient humans who lived in Africa several hundred thousand years ago.

III. A. Richards' research says that only one branch of ancient humans migrated out of Africa to create modern peoples, but research on ancient climate changes helps figure out the exact time when this migration occurred, according to Oppenheimer.

B. First, the climate changed 50,000 years ago, when heavy rains turned desert into rich land (the "Fertile Crescent" from the Arabian Gulf to Turkey). Then, people began to move into Europe.

C. Most Europeans and Americans come from ancestors who belonged to four mtDNA lines. These appeared 10,000 to 50,000 years ago in South Asia.

IV. A. The final stage in the early humans' journey was again brought on by climate change: The oceans moved back during the buildup of the polar ice caps 20,000 to 25,000 years ago and humans crossed over the land bridge that connected what Siberia and Alaska, says Cambridge University's Peter Forster.

B. Despite the widespread story of migration and the human family tree over the past 7,000 generations since "Eve," the most surprising result of the new picture of human evolution is how closely related all humans are.

C. Conclusion: In the search for ancient family connections, you only need to look at your neighbor — or across the world.

Exercise 22: Writing a brief summary, page 228

Possible summary:

Selection 2, "The Real Eve," reports that new scientific tools can trace early human migration, showing that all humans are related. Scientists have recently continued earlier research of DNA from mitochondria. They know that mutations occur regularly, so by comparing two samples of mitochondrial DNA (mtDNA), they have determined where humans have shared mutations and where they do not share mutations. This has told them the time in prehistory when the peoples had the same ancestors. Using this method, scientists showed that all humans can be traced back to an ancient mitochondrial "Eve" who lived in Africa 150,000 years ago.

Furthermore, scientists have learned more about human migration. Richards' research says that only one branch of ancient humans migrated out of Africa to create modern peoples. Research on ancient climate changes helps figure out the exact time when this migration occurred, according to Oppenheimer.

First, the climate changed 50,000 years ago, when heavy rains turned desert into rich land (the "Fertile Crescent" from the Arabian Gulf to Turkey). Then, people began to move into Europe. Most Europeans and

Americans come from ancestors who belonged to four mtDNA lines. These appeared 10,000 to 50,000 years ago in South Asia.

The final stage in the early humans' journey was again brought on by climate change: The oceans moved back during the buildup of the polar ice caps 20,000 to 25,000 years ago and humans crossed over the land bridge that connected what Siberia and Alaska, says Cambridge University's Peter Forster.

Despite the widespread story of migration and the human family tree over the past 7,000 generations since "Eve," the most surprising result of the new picture of human evolution is how closely related all humans are.

Exercise 23: Developing a perspective through research, page 229

1. Answers will vary. Research findings presented in "The Real Eve" are new. Some students may not accept them.
2. Answers will vary. Some students may reject the idea of a common ancestry with Africans if they believe people of different races cannot be genetically related.
3. Religious beliefs will color students' and instructors' reactions to the information in "The Real Eve".
4. Some students may wonder whether humans are all related.
5. Scientists may be inclined to conduct scientific studies in an objective fashion, following the scientific method. Therefore, they will look for concrete evidence to support their theories.

Exercise 26: Previewing the text, page 233

1. The writer says all the world's organisms are like a "great family tree," systematically relating one thing to another by way of likeness.
2. Crucifers, violets, and labiatae or mint
3. She liked to observe plants and animals. She learned from her sister and father.
4. Calls, hoots, squawks, jargles, whistles, and rasps.
5. Their songs are a reliable way of determining family ties.

Exercise 27: Understanding metaphors in scientific readings, page 234

1. A tree has roots, like a family's ancestors. It has a trunk, like parents, and branches, like children. The branches, in turn, have smaller branches, like grandchildren.

Exercise 28: General conclusion from scientific research, page 242

All living things are related, like a great family.

Exercise 29: Scanning for information, page 242

1. par. 12
2. par. 6, 7
3. par. 5

4. par. 12

5. par. 9

6. par. 11

7. par. 16

8. par. 14

9. par. 15

10. par. 12, 16

11. par. 4

12. par. 10

Exercise 30: Constructing a time line, page 244

Timeline should contain the following information, presented in chronological order, on a left-to-right timeline, marked with dates, events:

1700s: Carolus Linnaeus developed animal and botanical divisions

1700s: philosopher Denis Diderot said Nature varies the same type of product in many different ways

1700s: naturalist Georges Louis Leclerc said all animals arise from a single life form

1793: poet William Blake compared flies and men

1837: poet John Clare compared flies and people

1848: anatomist Richard Owen observed similarities (homologies) in living things, i.e. wing of bird, fin of fish, hand of man.

Exercise 31: Analyzing audience and purpose, page 245

Audience: 1. educated/some/either men or women

Purpose: 1. to inform/increase/pay more attention to the living world around them.

Exercise 32: Explaining metaphors in scientific writing, page 246

2. **Metaphor 1:** Creatures are not really “woven” together, but their genetic similarities create a “weaving” or connection among species.

Metaphor 2: A sudden feeling hits a person like a “bolt” or strike, but it’s not a physical strike. It’s a sudden idea.

3. **Metaphor:** Linnaeus invited scientists or interested people to “peep” or take a look into “[God’s] secret cabinet,” meaning the secret place where God invented living things. This metaphor suggests that Linnaeus was religious; he believed that life was created by God.

4. **Metaphor 1:** “Tidy nests within nests” means that in the Linnaean system, there was a hierarchy. One larger division contained smaller groups, like a small nest inside a larger nest. The writer probably uses this metaphor because she has written about bird species, nests being bird houses.

Metaphor 2: Again, the writer repeats two metaphors here: “stitched back together,” referring to all living things as being “woven” together like one piece of cloth, i.e. sharing genetic characteristics, and “a great familial tree,” again, describing living things as one connected, related family.

5. **Metaphor:** The tree metaphor is repeated here. Darwin compares species to branches of a tree, all coming from the same trunk, or family, of living things. The limbs are divided into smaller branches, meaning that species are related. One species evolves into other related species. Once, these limbs had been “small, budding twigs,” meaning that they had not existed for a long time. Then the species became more numerous.

6. **Metaphor:** The “thread” and “stitches” metaphor repeated throughout the reading again emphasizes the interconnectedness among species of living things. The writer wants the reader to see all life as a connected tapestry made up of connected threads and stitches.

7. **Metaphor:** The words “threads,” “weave her patterns,” “fabric” and “tapestry” echo the comparison between interconnected species of living things and a piece of fabric, made up of connected threads which create to make patterns and ultimately an interconnected tapestry. The metaphor also suggests the interdependence that exists among species. If one species disappears, the whole tapestry of life is affected. The species together form a beautiful whole.

Exercise 33: Participating in group discussion, page 248

1. Conclusion: All living things are related, like a great family. Answers will vary. Students may find it hard to believe that organisms as different as humans and fruit flies can be related.
2. The idea is logical because all three groups of organisms are designed with a central, vertical line: a spine. Off that spine are appendages, such as hands and legs (humans), fins (fish), and wings and feet (birds.)
3. The implication is that humans and fruit flies are genetically related. Scientists could perform studies in which drugs or treatments possibly beneficial to humans could be tested in fruit flies.

Exercise 35: Academic vocabulary, page 250

1. A 2. B 3. A 4. B 5. B

Exercise 37: Reviewing comprehension, page 251

1. Genetics is the branch of biology that deals with heredity, especially the mechanisms of hereditary transmission and the variation of inherited characteristics among similar or related organisms. It is also the genetic constitution of an individual, group, or class.
2. The five levels on which scientists must examine heredity are the individual, the cells, the chromosomes, the genes, and the nucleotide pairs.
3. Genotype is a person’s hereditary characteristics. Phenotype is the person’s observable or measurable characteristics.
4. The general conclusion related to “The Real Eve” is that all humans are closely related and come from Africa.

5. According to Selection 2, Eve's ancestors moved from Africa to Asia, then into Europe.
6. Mitochondria are the part of a cell that produce the energy needed by all living creatures. They possess their own DNA that is completely independent of the principal cellular DNA residing in the nucleus.
7. Mitochondria relate to "The Real Eve" because scientists have determined that mtDNA survive in the egg (female) cell from generation to generation. The mtDNA in all modern-day humans can be traced to the mtDNA found in "Eve." Thus, all humans can be traced back to "Eve," who lived in Africa 150,000 years ago.
8. According to Selection 2, all humans are very closely related.
9. In Selection 3, the general conclusion is that all living things are related.
10. Scientists use DNA as evidence that all human organisms are related.

Chapter 6 : History: A New Century

Note to teachers: Please read the Teaching Tips for this chapter before discussing the answers with your students.

Exercise 1: Discussing in a small group, page 256

Suggested answers are as follows:

1. There is an English class with students from different countries.
2. Studying English, talking with the teacher, smiling, reading a book, watching the teacher and students, listening to a conversation.
3. It was taken at a school in America.
4. It's not clear, but recently. The clothes show current styles.
5. Answers will vary, but the goal is to see a classroom of students. The difference is to look beyond personal differences to the point that unites them, being students who study English together.
6. In another country, all the students might look the same. On the other hand, there may not be any differences if students come from countries with diverse populations.
7. The American people include new Americans like themselves who together must face new challenges for the country and the world.

Exercise 2: Matching events, explanation and commentary, page 257

1. c. 2. e. 3. d. 4. a. 5. b.

Exercise 3: Using topics and themes, page 258

1. Chapter title: "Industry Comes of Age"

Check the following:

- ☐ When did industry grow up?
- ☐ How did industry grow up?
- ☐ What made industry grow up?
- ☐ What are examples of growing up?
- ☐ What is the significance of growing up?

2. Chapter title: "The Resurgence of Conservatism"

Check the following:

- ☐ When did conservatism resurge?
- ☐ Why did it experience resurgence?
- ☐ What does it mean for politics?
- ☐ What are examples of resurgence?
- ☐ Who led the resurgence of conservatism?

Exercise 4: Understanding the title, page 260

1. The author is referring to the American people who may come from a number of different countries to America as immigrants. They have the quality of being able to face a new century.
2. The people of America are facing a new future in a new century. To face something means to be personally close to it and to know what is coming. It means the eyes are open and looking. It is stronger than approach, which can mean a person comes toward something but could turn around.
3. The author uses the word new to give the idea of something that has not been faced before. The people will have to find out how to deal with the new century. Nobody has done it before. They will have to do it themselves.
4. Any number of issues could be mentioned from terrorism to new economic, environmental or medical challenges. What Americans do as they face these challenges will determine what kind of country America will be. The discussion should elaborate on the challenges and the potential impact on the country.

Exercise 5: Expanding the title, page 260

A possible answer is as follows:

The people of America are made up of the people of the world. They come to America to start a new life. The 21st century is one that all American people must face with open eyes because it presents new challenges. Some of these challenges are economic and many, such as the threat of terrorism, have to do with security in the world. How the American people face these challenges will determine what kind of country America will continue to be.

Exercise 6: Understanding the introductory quote, page 261

The following should be checked:

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☐ Americans have a new situation in the world, as did Lincoln during his time.

☐ Americans must think and act in a new way.

☐ Americans must separate themselves from the past to save the country.

Exercise 7: Checking comprehension, page 269

Theme

What does the author want you to know about America? Look for key points.

1. America as an established country (¶ 1)

America is old & new. Longest uninterrupted democracy ... Early to industrialize. A modern country for a long time....

2. American values (¶ 2)

American values of innovation, entrepreneurship, and risk-taking are an important part of America.

3. America's economy and culture (¶ 2)

The economy was growing and generating new job. American inventions are transforming global society. American culture is seen around the world.

4. America as a country that includes people from many places (¶ 3)

America is pluralistic. It's experience offers lessons to an internationalizing world.

5. New challenges in America's future (¶ 4)

Politics, economics, and cultural challenges remain.

6. How history is made (¶ 4)

History is made in a framework of what we inherit. Knowing what to continue and what to discard comes from historical study.

Exercise 8: Seeing the pattern, page 271

Complete the table below with historical details about "Economic Revolutions" (¶ 5–9)

Time period	The 1900s—at the turn of the century.	The 1920s—early 40s	The late 1940s–1970s	The 1980s and 1990s—at the end of the century
Main industry	<i>Heavy industry</i>	<i>Automobile Industry</i>	<i>Information industry</i>	<i>Communications industry</i>
A leading company	<i>United States Steel Corporation</i>	<i>General Motors</i>	<i>IBM</i>	<i>Microsoft</i>

The product	<i>Ingots, girders, sheet metal</i>	<i>Automobiles</i>	<i>Computers</i>	<i>Software, especially the Internet</i>
The importance of the revolution	<i>It built the physical infrastructure of the nation.</i>	<i>It began the shift to a 'consumer economy.'</i>	<i>Storing, organizing, and processing of data became an industry.</i>	<i>It was a communications revolution, which led to a global village.</i>

Exercise 9: Discussing patterns, page 272

1. The product of the 1900s was big and general. It was industrial and not made for individuals.
2. It has reduced in size and become available to many more people.
3. A revolution means a complete change. These changes impact individuals and societies.
4. It helps to create a larger picture of the reading and thus what the author's main idea is.
5. a) scientific research led to revolutions in the economy by unlocking the secrets of molecular genetic structure.
b) An example of a social/moral problem brought about by increasing scientific knowledge is genetic mutations that might threaten the environment.
6. Commentary gives us the greater understanding because it tells the significance of the raw data and information.
7. Each period had its own revolution that had both "promise and peril".

Exercise 10: Understanding a comparison, page 273

- ☐ Many countries do a better job of distributing wealth than America.

Exercise 11: Supporting a comparison, page 274

1. supporting evidence

Equals

Information such as facts that can be proved.

2. a statement

Equals

A position an author takes based on knowledge and evidence

Exercise 12: Locating support for a comparison, page 274

The Evidence	Supports the idea that "the rich got much richer".	Supports the idea that "the poor got an ever-shrinking share of the pie".
1. "The richest 20 percent of Americans in the 1990s raked in nearly half the nation's income." (¶ 11)	√	
2. "... whereas the poorest 20 percent received less than 4 percent".		
3. "Between 1968 and 1998, the share of the nation's income that flowed to the top 20 percent of its households swelled from more than 40% to more than 49%"		
4. "Even more striking, in the same period the top 5 percent of income earners saw their share of the national income grow from 15% to more than 20%".		
5. "The Welfare Reform Bill of 1996, restricting access to social services and requiring able-bodied welfare recipients to find work, weakened the financial footing of many impoverished families still further".		
6. "Widening inequality could be measured in other ways as well: chief executives in the 1970s typically earned forty-one times the income of the average worker in their corporations; by the 1990s they earned 225 times as much".		
7. "At the same time, some 34 million people, 12.7 percent of all Americans (8.2 percent of whites, 26.1 percent of African-Americans, and 25.6 percent of Latinos), remained mired in poverty, a depressing indictment of the inequities afflicting an affluent and allegedly egalitarian republic".		

Exercise 13: Understanding graphics, page 276

1. The photos show the different ways that people in America live. In the top picture, the neighborhood is old, dirty, and not in good condition. In the bottom picture, the opposite is true. The child riding a bike shows it's a safe neighborhood.

2. The table shows that income for the lowest, second, third, middle and fourth fifths (80%) of the population has decreased while the top fifth (20%) and the top 5% has increased.

Exercise 14: Studying academic vocabulary, page 282

1. Immigrants must be careful to keep their visas current in order to maintain their legal status.

2. After World War II, many middle-class Americans moved out of the city into the suburbs.

3. Personal income is usually the amount of money a person earns.

4. In history, there has been an unfortunate compounded cycle of discrimination where people have suffered because of their race, ethnicity, religion, or origin.
5. In the 1960s, Martin Luther King Jr. helped lead the civil rights movement which changed America forever.
6. One benefit of having a middle class is that it had core institutions, such as schools and small businesses, which strengthen communities.
7. Over the past 50 years, the social environment concerning race and discrimination has improved, but many things still need to change.
8. The years 1960 to 1969 were a decade of major social change in America.
9. Voters of different political constituencies must work together to gain any real power.
10. Minorities who make gains over time have benefited from their efforts.

Exercise 15: Recognizing implications, page 284

1. It's a gain and a continued challenge. It's a gain because they are more important. It's a challenge too because population relationships will change, and some people might not be happy about that.
2. It's a gain to dramatically change the status of an ethnic groupage
3. It's a gain because awakening ethnic and cultural pride will drive American Indians to become stronger and more confident. It's a Challenge because as they become more confident, then will encounter and address more challenges.
4. It's a continued challenge to overcome these tensions and improve cities.
5. It's a continued challenge for blacks to find justice in America.
6. It's a continued challenge for American society to develop politically when divisions increase between American cities and the suburbs.
7. It's a gain and a continued challenge. African-Americans have the gain of their prosperity, but are challenged to reach full equality.
8. Answers for #'s 8 and 9 will vary. An example of a quote and explanation is as follows:
"The number of black elected officials had risen about 7,000." As more blacks are elected to office, they may better represent the African-American community.
9. "Single women headed over half of all black families, almost three times the rate for whites." Fatherless children will be challenged emotionally, economically and in other ways to fully participate in American society.

Exercise 16: Previewing and recognizing related topics, page 287

Students should check the following topics:

- ☐ The events of September 11, 2001
- ☐ The impact of 9/11 events on the American mind

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- ☐ President Bush's response to 9/11
- ☐ The war on Afghanistan
- ☐ The military power of America
- ☐ The impact of 9/11 on civil rights and immigrant rights
- ☐ The connection between America's cultural conflicts and 9/11
- ☐ America's role in the world

Exercise 17: Reviewing comprehension, page 293

These are some possible answers:

1. America is the oldest continuous democracy in the world. It also was one of the first countries to industrialize and has been part of the modern economic era longer than most countries. However, it is a country which values youthful characteristics such as innovation, entrepreneurship, and risk taking.
2. Because America is a pluralistic society, its experience in working towards achieving tolerance and justice for all could be helpful to others in an internationalizing era of human history.
3. The economic systems have changed a number of times over the last 100 years. The US has gone from an industrial economy to a communications-based economy. The types of products produced have become more available to individuals and have impacted these people directly.
4. The disparity in the U.S. between the rich and the poor has grown dramatically over the last twenty-five years. While the income for 80% of the people decreased, the income for the top 20 % increased. At the same time, government benefits available to the poorest people has decreased.
5. The numbers of Hispanic-Americans grew so that soon in the twenty-first century, they will be the largest minority group. Asian-Americans, as a percentage of the population, also have grown greatly in numbers. Overall, it is anticipated that by midway through the twenty-first century, there will be more non-whites than whites in America.
6. Minorities have outnumbered whites in many American cities. By being left in the inner cities by their more middle class counterparts who moved to the suburbs, poor minorities were caught up more with the problems related to poverty: crime, drugs, and lack of opportunity.
7. A great number of African Americans prospered following the civil rights movement. Increasing numbers have joined the middle class and have been elected to public office.
8. The government of Afghanistan, the Taliban, would not hand over Osama Bin Laden to the United States and the country was the location of many terrorist-training camps.
9. The USA-Patriot Act was passed through Congress. It has allowed the government to monitor the activities of citizens and non-citizens and to crack down and deport immigrants associated with terrorism.
10. The quote recognizes that Americans must face new challenges and re-make America in order to keep America true to its ideals.

Exercise 18: Participating in small-group discussion, page 294

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The nature of the questions requires that students give their own personal reflections on the text and their knowledge of recent American and world history. The correct answers will be those in which the student demonstrates a comprehension of the text and an ability to integrate that comprehension with his or her own understanding of history and world events.

Exercise 19: Writing in your reading journal, page 295

1. A theme is the main idea of a reading that an author emphasizes and repeats in a chapter. The theme also includes the main point about a reading that students need to remember for quizzes and tests.
2. Each chapter title contains a theme. By reading the chapter titles, students can understand the important information in the chapter.
3. The introductory quote can lead the reader to discover the theme of the chapter. The quote reflects its main ideas. The quote gives a greater amount of context to the information in the chapter and it reflects in well-written language the chapter's main theme.
4. A repeating pattern aids the reader in a number of ways. When a writer uses a pattern, the reader can expect the same kind of information, such as theory, examples, and predictions to be repeated. Then the reader can compare these elements and understand their purpose. In an historical book, the author usually uses a narrative pattern of telling and explaining the facts of history.
5. Graphics help by restating the information in a text in a different way. When readers see information in different forms, they often gain a greater understanding. Graphics are particularly helpful to people who learn best by seeing information. These types of students are called visual learners.

Reflections on History

1. History is a record of events that happened in the world over time along with an explanation of the importance of these events. History is not an isolated set of events, but rather events that occur in a number of contexts. The events of 9/11, for example, occurred in the context of a Middle East where unresolved conflicts have continued for decades and where Western powers have tried to impact the governance of these countries despite the resistance of local people who want religious and political autonomy.
2. History tells us not only what happened, but why it happened and what that means for the future.
3. For the most part, the writer seems to be objective. Students may find certain passages which are more subjective.

Exercise 21: Reviewing academic vocabulary, page 296

Across

- | | |
|------------------|---------------|
| 2. revolution | 18. tensions |
| 6. justified | 19. benefited |
| 10. demonstrated | 23. isolated |
| 13. environment | 24. sustain |
| | 25. percent |

Down

- | | |
|-------------------|--------------------|
| 1. constituencies | 15. minority |
| 3. institutions | 16. status |
| 4. whereas | 17. civil |
| 5. presumably | 20. ethnic |
| 7. emphasized | 21. evident |
| 8. reaction | 22. discrimination |
| 9. complexity | |
| 11. revealed | |
| 12. compounded | |
| 14. majority | |